December 16, 1953

AIRMAIL

Dr. E. L. Tatum
Department of Biology
Stanford University
California

Dear Ed:

I hope this is not too soon to extend the very best wishes of the season and for the New Year.

I am writing primarily to ask a favor that you may possibly be in a position to extend. Dr. Sidney Rubbo from the University of Melbourne is visiting us for a few months to do some work in microbial genetics. We thought it might be instructive to start a few pilot experiments with yeast. I had in mind primarily a comparison of some features of the mating process in yeast with E. coli K12, especially possible differential effects of ultraviolet light and other agents on vegetative and sexual vitality. We would like to execute these experiments along lines rather similar to the coli work and for this purpose would like to have on hand a set of a few different nutritional mutants belonging to one and the other of the mating types. Do you have any of this sort of material on hand? If so, may I ask whether you can send this to us within a reasonably short time, as Dr. Rubbo's time here is rather limited. I have gotten a few things from Sy Pomper but he has just moved to a new laboratory and is pretty well engrossed in those matters. Whatever details may be available on the pedigrees of these cultures would be appreciated, too.

Lately I have been spending (and I hope not wasting) a good deal of time on single-cell isolations of crossing cultures of E. coli. So far out of several score isolations I have picked up two interesting ones. The first of these consisted of a pair of cells, one resembling each parent, which when plated, gave rise to a large yield of recombinants as well as the two parents. The second instance was a rather large cell which gave rise to recombinants and one of the parents (the F-) after plating. These are, of course, just preliminary results, although they tend to support the mating idea.

Yours as ever,

Joshua Lederberg

/mg